



Supplemental Figure 1. Verification of the apoptosis of ECs by the investigation of doubled stained (TUNEL and lectin) whole-mount samples harvested at 72 hours after the VEGF application in LSM Zeiss 510 M. The overview picture (a) displays the cross-section through the whole-mount sample with apparent vascular lumen (Lu). The projection image (“Volume”) of a Z-stack of LSM images of endothelial vascular surface (red=endothelial cell surface marker) distinctly shows TUNEL-positive (green) endothelial cells. Nuclei of apoptotic endothelial cells are indicated with *asterisks*.

Material and method:

Apoptosis (TUNEL) assay combined with endothelial cell surface staining

The whole-mount samples of the CAM vasculature were harvested and fixed in 2%PFA at 72 hours after the VEGF gel application. They were further stained for fluorescence staining using the TUNEL Label Mix (Roche Diagnostics AG, Switzerland; Cat Nr:11767291910) to visualize the apoptotic cells and rhodamine-labeled Lens culinaris agglutinin (LCA) (Vector Labs, CA, USA; Cat. Nr: RL-1042) for visualization of endothelial cell surface according to the manufacturer’s recommendations. The mounted samples were then investigated in the LSM Zeiss 510M, the obtained Z-stacks of images were afterwards imported in and analysed by Imaris Software.